

said tower comprising a plurality of perforated trays without downcomer disposed respectively at a plurality of stages, each of the plurality of perforated trays without downcomer being provided with a plurality of holes, wherein

each of the plurality of holes has a diameter d in a range of from 10mm to 25mm, and each of the plurality of holes is separated from an adjacent hole by a center-to-center distance in a range of from $1.2d$ to $3d$,

wherein, when two or more of the plurality of perforated trays without downcomer are used at the same stage, the two most closely located holes that respectively belong to adjacent perforated trays are separated from one another by a center-to-center distance in a range of from 50mm to 150mm.

4. A perforated tray tower without downcomer, comprising a plurality of perforated trays without downcomer disposed respectively at a plurality of stages, each of the plurality of perforated trays without downcomer being provided with a plurality of holes, wherein

each of the plurality of holes has a diameter d in a range of from 10mm to 25mm,

the perforated tray without downcomer has a thickness in a range of from 2mm to 8mm,

the perforated tray without downcomer has an opening ratio in a range of from 10% to 30%, and

each of the plurality of holes is separated from an adjacent hole by a center-to-center distance in a range of from $1.2d$ to $3d$,

wherein, when two or more of the plurality of perforated trays without downcomer are used at the same stage, the two most closely located holes that respectively belong to adjacent perforated trays are separated from one another by a center-to-center distance in a range of from 50mm to 150mm.

7. The perforated tray tower without downcomer according to claim 4, wherein the plurality of perforated trays without downcomer disposed respectively at vertically adjacent spacing have a blind ratio of not less than 0.2 and not more than 1.

C³ 8/9. A method of distillation, comprising the step of distilling an easily polymerizable compound or a liquid containing an easily polymerizable compound, using a perforated tray tower without downcomer, comprising a plurality of perforated trays without downcomer disposed respectively at a plurality of stages, each of the plurality of perforated trays without downcomer being provided with a plurality of holes, wherein

each of the plurality of holes has a diameter d in a range of from 10mm to 25mm,

the perforated tray without downcomer has a thickness in a range of from 2mm to 8mm,

the perforated tray without downcomer has an opening ratio in a range of from 10% to 30%, and

each of the plurality of holes is separated from an adjacent hole by a center-to-center distance in a range of from $1.2d$ to $3d$,
wherein, when two or more of the plurality of perforated trays without downcomer are used at the same stage, the two most closely located holes that respectively belong to adjacent perforated trays are separated from one another by a center-to-center distance in a range of from 50mm to 150mm.

9 10/8. The method of distillation as defined in claim 9, wherein the distilling step is carried out under at least one of first and second conditions,

the first condition being such that an amount of wetting liquid with respect to a cross-sectional area of the tower is at least $0.3\text{m}^3/\text{m}^2 \cdot \text{h}$, and

the second condition being such that an amount of wetting liquid with respect to a sum of areas of the plurality of holes is at least $1\text{m}^3/\text{m}^2 \cdot \text{h}$.

C⁴ 10/8 12. The method of distillation as defined in claim 9, wherein the easily polymerizable compound is at least one compound selected from the group consisting of (meth)acrylic acid and esters thereof.